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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/993,567	11/27/2001	Chin-Wen Chou	CHOU3056/EM	7440
2292	7590	12/14/2004	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			LIU, MING HUN	
			ART UNIT	PAPER NUMBER
			2675	

DATE MAILED: 12/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/993,567

Applicant(s)

CHOU ET AL.

Examiner

Ming-Hun Liu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-6 and 8-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 8-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-6 and 8-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 6,399,904 to Mimata in view of US Patent 6,313,731 to Vance.

In reference to claim 1, as shown in figure 2, Mimata teaches a directional switch, with a base block (item 4) housing with four contact terminals (32) in various directions and a an elastic diaphragm (23) above the common contact (22). The control unit is located in the housing with a conductive member (33) with conductive pressing spots matching the contact terminals. Lid (62) includes a hole where the rod from the control block extends through. When the pressing block is manipulated, the contacts switches are closed to denote a direction signal. It can also be seen from figure 4, that the depressing block includes depressing spots. Lastly, Mimata includes a resin sheet (item 10) is inserted between the contact block and the conductive member.

Mimata's invention is similar to the one being claimed however instead of having only one sheet to create the conductive member, Mimata's invention uses 4 smaller conductive members. This however is a design preference as it would have been obvious to one skilled in the art to use only one sheet of conductive member.

Another aspect of the applicant's invention that is not reflected in Mimata's disclosure is the idea of having the control rod pass through the depressing block. There is no disclosed criticality as to why the rod must pass through the depressing block. As one skilled in the art

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understands there are several ways of connecting the rod with the actual depressing block. Vance teaches in figure 2 where the rod is inserted into a recess to combine the two elements. Mimata's invention could have been modified to resemble the claimed invention by incorporating Vance's male/female combination to the depressing block. It would have been obvious to make such an adjustment to modularize the fabrication process.

In reference to claim 2, it can be seen from figure 2 of Vance, the rod passes through the recess to engage with the retaining flange on the rod.

In reference to claims 3 and 4, it can be seen from figure 1, that items 16 and 61 of Mimata correspond to the latch and anchor systems disclosed by the applicant.

Claim 5 is rejected largely on the grounds presented in the rejection of claim 1. As to the remaining portion of the claim, there is no disclosed criticality as to why the lining pad must have four ends each having a strut and a center which has an indented section, the conductive member having an operation opening for the indented section to pass through. The importance of the claim lies in the fact that the two distinct elements must be able to be attached to one another in a fashion where the distinct elements do not move in respect to each other in order to function as if it were a single element. The method of attachment is a design criterion that can be easily adjusted by one skilled in the art. It would have been obvious to one skilled in the art to add struts and indent sections to the components in order to assist with the fitting and stability between the separate components.

In reference to claim 6, Mimata discloses a directional switch that resembles the one being claimed, but never explicitly teaches matching indentations between the lid and the depressing block. From figure 2 of Mimata, one skilled in the art understands that it is inherent to

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the art of the device to manufacture the two components so that they fit well together. It would have been obvious to add corresponding troughs to the lid and depressing block to better facilitate the construction and movement of the device.

In reference to claim 8, there is no disclosed criticality as to why the depressing block has reinforced sections located on the top surface thereof extending from the axle opening to the second depress spots. Structural reinforcements corrections are commonly made in the art on areas of a device where engineers believe require additional support. It would have been obvious to one skilled in the art to add reinforced sections on the axle to the second depressing spots so that the force utilized on the axel can be concentrated onto the depressing spots without breaking the block.

As to claim 9, it can be seen from figure 2 or Mimata, the bottom housing has a circular depression made to accommodate the elastic diaphragm.

In reference to claim 10, by referring to Vane's disclosure in figure 2, it can be seen that the axle rod has a fasten trough for coupling with a direction control element (item 112). The pad can be used for cell phones (column 1, line 67).

Claim 11 is rejected on the grounds presented in the rejection of claims 1 and 5.

Claim 12 is rejected on the grounds presented in the rejection of claim 2.

Claims 13 and 14 are rejected on the grounds presented in the rejection of claims 3 and 4.

Claim 15 is rejected on the grounds presented in the rejection of claim 5.

Claim 16 is rejected on the grounds presented in the rejection of claim 6.

Claim 17 is rejected on the grounds presented in the rejection of claim 9.

Claim 18 is rejected on the grounds presented in the rejection of claim 10.

***Response to Arguments***

3. Applicant's arguments with respect to claims 1-6 and 8-18 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US Patent 6,809,274 to Takeuchi et al: Separate rod from depressing block

US Patent 5,231,386 to Brandenburg et al: Separate rod from depressing block


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ming-Hun Liu whose telephone number is 703-305-8488. The examiner can normally be reached on Mon-Fri.

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ming-Hun Liu



DENNIS-DOON CHOW  
PATENT EXAMINER